

CLAIMS

1. A device for rendering an image, comprising:
a panel having a viewing side and a non-viewing side,
5 having:
a peripheral region, and
a central region; and
a pattern of contacts formed in the central region of the non-viewing side.

10 2. The viewing device of claim 1, wherein the pattern of contacts is configured to receive a component.

3. The viewing device of claim 2, wherein the component is a printed circuit board.

4. The viewing device of claim 2, wherein the component is an integrated circuit.

5. The viewing device of claim 2, wherein the component is a viewing device driver circuit.

6. The display panel of claim 1, further comprising a socket coupled to the pattern of contacts and structured to receive a component in the central zone.

25 7. The viewing device of claim 1, wherein the pattern of contacts is configured to receive a plurality of components in the central zone.

8. The viewing device of claim 7, further comprising a plurality of components connected to the second side of the panel.

30 9. The viewing device of claim 1, further comprising:
a display contact layer;
a dielectric layer; and
an electrically conductive circuit layer including the pattern of contacts.

10. The viewing device of claim 9, wherein the display contact layer couples the plurality of display cells and the electrically conductive circuit layer.

11. The viewing device of claim 9, wherein the electrically conductive circuit layer couples the display contact layer and the bond pad layer.

12. The viewing device of claim 9, wherein the bond pad layer includes a plurality of bond pads operative to couple the electrically conductive circuit layer to an attached component.

13. The viewing device of claim 9, wherein the bond pad layer includes a plurality of bond pads operative to couple the electrically conductive circuit layer to an attached plurality of components.

14. A viewing device, comprising:
a panel including:

a plurality of display cells distributed on a first side of the panel, said a plurality of display cells configured to display an image,

a second side of the panel, and

a central zone and a peripheral zone formed on the second side; and
a matrix of interconnects on the second side of the panel, the matrix of interconnects structured to connect a component to the second side of the panel in the central zone.

15. The viewing device of claim 14, wherein the matrix of interconnects is configured to receive a plurality of components.

16. The viewing device of claim 14, wherein the component is a viewing device driver circuit.

17. The display panel of claim 14, further comprising a socket coupled to the matrix of interconnects in the central zone, the socket being adapted to receive a component.

18. An electronic display system, comprising:

an image generator;

a display interface coupled to the image generator; and

a display coupled to the display interface, the display including:

a panel having a first side and a second side, the first side of the panel including a plurality of display cells distributed thereon, the plurality of display cells structured to display an image, and

a matrix of interconnects on the second side of the panel, the matrix of interconnects structured to connect a component to the second side of the panel.

19. The viewing device of claim 18, wherein the panel further includes a periphery and the component is connected to the panel within the periphery.

20. The viewing device of claim 19, wherein a plurality of components are connected to the panel within the periphery.

21. The viewing device of claim 19, wherein the plurality of components include a printed circuit board.

22. The viewing device of claim 19, wherein the plurality of components include an integrated circuit.

23. The display panel of claim 18, further comprising a socket coupled to the matrix of interconnects, the connected component being received in the socket.

24. The electronic device of claim 18, further comprising a video driver interposed between the display interface and the matrix of interconnects.

25. A process for fabricating a display panel of a type that includes a plurality of display cells distributed within the panel, the process comprising:
forming a display contact layer having a two-dimensional array of display contacts coupled to the plurality of display cells;

depositing a first insulating layer; and
forming a bond pad layer coupled to the circuit layer, the bond pad layer substantially disposed within the central region of the first side of the panel.

26. The process of claim 25, wherein the first electrically conductive circuit layer is formed within the central region of the first side of the panel using a subtractive etching process.

27. The process of claim 25, further comprising:
forming, on the first insulating layer, a first electrically conductive circuit layer coupled to the array of display contacts, said first electrically conductive circuit layer comprising traces selectively coupling the display contact layer and the bond pad layer; and
depositing a second insulating layer prior to forming the bond pad layer.

28. The process of claim 27, further comprising:
forming a second electrically conductive circuit layer;
depositing a third dielectric layer; and
wherein the bond pad layer selectively electrically couples the display contact layer to first electrically conductive circuit layer and the second electrically conductive circuit layer.

29. The process of claim 28, further comprising forming a plurality of interlayer connects to electrically couple the first electrically conductive circuit layer to the bond pad layer through the dielectric layer, the second electrically conductive circuit layer, and the third dielectric layer.

30. The process of claim 25, wherein the display cells are emissive display cells.